WISCONSIN STATE LEGISLATURE COMMITTEE HEARING RECORDS

2005-06
(session year)

Assembly
(Assembly, Senate or Joint)

Task Force on Medical Malpractice (ATF-MM)

Sample:

Record of Comm. Proceedings ... RCP
- 05hr_AC-Ed_RCP_pt01a
- 05hr_AC-Ed_RCP_pt01b
- 05hr_AC-Ed_RCP_pt02

- *Appointments* ... *Appt*
- **

- *Clearinghouse Rules* ... *CRule*
- **

- *Committee Hearings* ... *CH*
- **

- *Committee Reports* ... *CR*
- **

- *Executive Sessions* ... *ES*
- **

- *Hearing Records* ... *HR*
- **

- *Miscellaneous* ... *Misc*
- **05hr_ATF-MM_Misc_pt37b**

- *Record of Comm. Proceedings* ... *RCP*
- **

It seems likely, however, that few fields other than medical liability present such a direct and personal overlap between potential witnesses and potential defendants.

The overlap between defendants and experts in medical liability cases was intensified, in the early twentieth century, by the locality rule, which required that expert testimony come from one who practiced in the defendant's community. The overlap in the twenty-first century may be heightened by requirements that the expert practice in the same specialty as the defendant. Moreover, some parts ***1014** of the medical community appear to be attempting to control more stringently the testimony of medical experts. [FN368]

These factors may support the consideration of reforms specific to medical liability cases. All other things being equal, procedural changes may be particularly helpful in malpractice cases to the extent that they either increase physician confidence in the litigation system or remove the impetus for detrimental self-help measures by the medical community.

To provide further definition to the analysis, it is useful not only to assess procedural reforms with respect to medical liability (as opposed to litigation in general), but also to consider how the system's procedural aspects could change in the face of alterations in the substantive law of medical liability. [FN369] This Article has based its discussion of litigation procedures on the assumption that the current substantive law of medical malpractice applies. A number of commentators, however, advocate major changes in the substantive law. [FN370] For example, one proposal would replace the current system of fault-based liability with a system in which claimants are compensated if their injuries fall within "avoidable classes of events" ("ACEs")--bad results that are clearly preventable. [FN371] "Avoidable classes" would be specified in advance by experts using empirical data on medical safety, removing the need for individual determinations, in many cases, of whether a physician breached the standard of care and whether the breach caused the claimant's injury. ACEs-based provisions would obviate a number of the liability-focused concerns that have motivated procedural reform, though it would still be necessary to develop guidelines for the determination of damages. Thus, changes in substantive medical liability law would change the landscape of procedural reform as well.

Having considered medical-liability reform, it makes sense to broaden the inquiry to ask whether insights gained with respect to malpractice could apply elsewhere as well. As a matter of recent ***1015** history, it is worth noting that while the wave of legislation in the 1970s focused on reforms specific to medical malpractice cases, the wave of similar measures in the 1980s imposed "tort reform" more generally. [FN372] As a political matter, then, medical liability reforms may provide an impetus for reforms in other areas of law.

In addition, as a matter of sound policy, some reforms that may be useful in medical liability cases may also be helpful in other kinds of cases. Policymakers should consider the application of expert witness reforms and jury reforms to other types of cases--such as products liability cases--that may present challenging scientific or technical questions. Likewise, it makes sense to investigate whether other kinds of cases--perhaps other personal injury actions--tend to result in variable noneconomic damages awards that could usefully be reviewed under a more stringent remittitur standard.

Those reforms might usefully be adopted in a "function-specific," rather than

"substance-specific," manner--for example, based on the degree of scientific complexity rather than based on the topic of the claim. [FN373] A "function-specific" measure could apply to more than one type of case. It also could apply to fewer than all cases within a specific category. Some commentators tend to imply that all medical malpractice trials require the jury to address complex scientific questions. [FN374] In reality, however, malpractice cases vary considerably in their degree of complexity and scientific difficulty. [FN375] Thus, for example, not all malpractice cases will require special approaches to expert testimony or procedures to foster active learning by jurors. This variation underscores the inefficiency of approaches, such as screening panels or specialized courts, that would institute a costly procedure based on concerns that arise only in a portion of malpractice cases.

Conclusion

This Article was prompted by the notion of malpractice exceptionalism--the idea that medical liability cases may require litigation procedures that other kinds of cases do not need. The political reality behind this notion is that physicians and insurers have succeeded in presenting the medical liability problem as a crisis that is unique and that requires drastic, malpractice-specific reform.

Behind the political landscape lies a social and historical reality that warrants malpractice-specific analysis. In sorting through the tangle ***1016*** of issues regarding medical liability, policymakers should be aware that some key issues concern the way in which the medical community interacts with the legal system. The latter often looks to the medical community to define the standard of appropriate medical care and to provide expertise needed to resolve contested issues. Tensions have persisted over time, however, based both on the medical community's frustration with the adversarial litigation system and on the tendency of some medical communities, at some points in time, to assert undue control over the outcomes of medical liability disputes.

Medical liability reform, then, is targeted toward an interdisciplinary phenomenon: the intersection of medicine and law. Relatedly, I have argued that the proper assessment of such reform requires an interdisciplinary analysis. Drawing upon historians' work on nineteenth century medico-legal developments and upon sources from the period, Part I reviewed the ways in which the nineteenth century debate prefigured current problems. Part II made use of recent social science research to assess the performance of judges, juries, and particular procedural reforms in medical liability litigation. I argued in Part II that some of the procedural changes that physicians might prefer are inadvisable, but that other approaches-- particularly reforms of expert witness procedures, efforts to promote active learning by jurors, and a more stringent remittitur standard--may prove useful. Part III considered whether the questions addressed in this Article really ought to be viewed as specific to medical malpractice cases, or whether the procedures I advocate could apply to other areas as well. I suggested that those procedures might be useful in some other types of cases, and that such procedures might be applied on a function-specific, rather than a topic- specific, basis.

Some readers may not be persuaded, in the abstract, that substance-specific procedures are needed to address medical liability reform. However, experience supports the argument that procedural reforms should be analyzed on a substance-specific basis. Reforms targeted at medical liability are a political reality, and the only question is whether their adoption will be driven solely by interest-group politics or informed by

sound substance-specific analysis.

[FNa1]. Assistant Professor, University of Pennsylvania Law School. I thank Stephen Burbank, Eric Feldman, Sarah Barringer Gordon, Geoffrey Hazard, Kristin Madison, Bruce Mann, and William Sage for extremely helpful comments on prior drafts, and Susanna Blumenthal, Joe Cecil, Roger Cohen, Philip Howard, Peter Huang, Alan Lerner, Louis Rulli and Kim Scheppele and participants in the University of Pennsylvania Ad Hoc Workshop series for their thoughts on one or more of the ideas discussed in this Article. Remaining errors, of course, are mine. I am grateful to Richard Horvath, Marianne Staniunas and Ruth Sternglantz for excellent research assistance, and to Ronald Day, Merle Slyhoff, Joseph Parsio and others at the Biddle Law Library for locating hard-to-find sources. This work was supported in part by The Project on Medical Liability funded by The Pew Charitable Trusts.

[FN1]. The lack of consensus is not new. See, e.g., U.S. Gen. Accounting Office, Medical Malpractice: No Agreement on the Problems or Solutions, GAO/HRD Rep. 86-50, at 3 (1986) ("GAO found no agreement among the major interest groups surveyed regarding the problems, their severity, their solutions, or the proper role of states or the federal government.").

[FN2]. See, e.g., Daniel Kessler & Mark McClellan, Do Doctors Practice Defensive Medicine?, 111 Q.J. Econ. 353, 388 (1996) ("We conclude that treatment of elderly patients with heart disease does involve 'defensive' medical practices, and that limited reductions in liability can reduce these costly practices."). But see Michelle M. Mello & Troyen A. Brennan, Deterrence of Medical Errors: Theory and Evidence for Malpractice Reform, 80 Tex. L. Rev. 1595, 1607 (2002) ("It is likely that defensive medicine, to the extent that it ever took place, has diminished over time in response to the growing presence of managed care.").

[FN3]. See infra text accompanying notes 172-75.

[FN4]. Obviously, procedure and substance blend into one another. Nonetheless, for purposes of this Article, I use the following distinction: "[T]he basic thrust of substantive rules--controlling... behavior in society-- is primary, while procedural rules are secondary, and are invoked only in connection with litigation." Richard L. Marcus, Of Babies and Bathwater: The Prospects for Procedural Progress, 59 Brook. L. Rev. 761, 777 (1993).

[FN5]. See infra notes 249-50 and accompanying text.

[FN6]. See, e.g., 40 Pa. Cons. Stat. Ann. § 1303.512 (West Supp. 2003) (setting qualifications for experts in medical malpractice cases).

[FN7]. See infra text accompanying notes 301-02, 353-54.

[FN8]. See infra text accompanying notes 282-86.

[FN9]. Other types of expert testimony may also be presented--for example, the parties may retain economists to testify concerning future damages.

[FN10]. See Peter Huber, Junk Science in the Courtroom, 26 Val. U. L. Rev. 723, 731 (1992). Huber argues, with respect to tort claims, that "[m]ost juries decide cases in a way that is consistent with mainstream science. But some do not, delivering substantial payoffs for questionable claims." Id.

[FN11]. Such concerns extend beyond the context of medical malpractice litigation. See, e.g., Troyen A. Brennan, Helping Courts with Toxic Torts: Some Proposals Regarding Alternative Methods for Presenting and Assessing Scientific Evidence in Common Law Courts, 51 U. Pitt. L. Rev. 1, 4 (1989) (discussing causation testimony in toxic tort litigation and noting that "[j]udges fear that juries can be misled by highly paid experts who will find at least some support in the voluminous scientific literature for any position, even when that position is repudiated by the majority of scientists"); Samuel R. Gross, Expert Evidence, 1991 Wis. L. Rev. 1113, 1130 ("Some expert can almost always be found to testify to any plausible (and many implausible) expert opinions; if nothing else, a friendly expert can serve to undermine any expert who testifies for the opposition.").

[FN12]. See, e.g., Daniel W. Shuman, Expertise in Law, Medicine, and Health Care, 26 J. Health Pol., Pol'y & L. 267, 275 (2001) (noting the argument "that jurors lacking scientific or technical expertise have relied on irrational, superficial criteria to assess the believability of experts").

[FN13]. See infra note 247 and accompanying text.

[FN14]. See Huber, supra note 10, at 749 (applauding state laws that tighten qualification requirements for experts in medical malpractice cases).

[FN15]. See infra text accompanying note 292.

[FN16]. See infra text accompanying notes 353-54.

[FN17]. My reference to "lay decision makers" includes judges, because judges--though they possess legal training--generally lack medical training.

[FN18]. I am indebted to Jay Gold's thoughtful discussion of this insight as it relates to several areas of health law. See Jay Alexander Gold, Wiser Than the Laws?: The Legal Accountability of the Medical Profession, 7 Am. J.L. & Med. 145, 145 (1981) (arguing "that many seemingly disparate questions in health law are related to the issue of how experts are to be held accountable to non-experts--how the principle that decisions should be made by those most affected is to be reconciled with the principle that decisions should be made by those with experience and training in the area").

[FN19]. Researchers who surveyed practicing lawyers and federal trial judges in the late 1990s asked respondents to indicate how frequently they had encountered each of a list of twelve possible difficulties with respect to expert witnesses; the problem identified by both groups as most frequent was "[e]xperts abandon objectivity and become advocates for the side that hired them." Carol Krafka et al., Judge and Attorney Experiences, Practices, and Concerns Regarding Expert Testimony in Federal Civil Trials, 8 Psychol., Pub. Pol'y, & L. 309, 314, 316, 328 (2002) (using a scale of from "1 (very infrequent) to 5 (very frequent)" and reporting mean scores--with respect to the objectivity issue--of 3.69 from judicial respondents and 3.72 from attorney respondents).

[FN20]. Thus, for example, a jury might give more weight to the views of a court-appointed expert or a medical screening panel than to the views of a party-retained expert witness, because the jury might view the court-appointed expert or the screening panel as less biased.

[FN21]. See infra text accompanying note 337.

[FN22]. See infra text accompanying notes 278-79.

[FN23]. Cf. James C. Mohr, Doctors and the Law: Medical Jurisprudence in Nineteenth-Century America 255 (1993) (noting that Americans "have seldom viewed" the medical malpractice issue "as the product of specific nineteenth-century historical circumstances or placed it in the larger context of evolving relations between American physicians and the nation's legal processes").

[FN24]. Cf. John J. Elwell, A Medico-Legal Treatise on Malpractice and Medical Evidence, Comprising the Elements of Medical Jurisprudence 70 (1860) ("The reported cases on the subject of Malpractice are few, as they but seldom reach the Supreme courts.").

[FN25]. See Kenneth Allen De Ville, Medical Malpractice in Nineteenth-Century America: Origins and Legacy 25 (1990) ("Although medical malpractice suits were virtually nonexistent between 1790 and 1835, thereafter patients suddenly began to sue their physicians at an increasing and unprecedented rate."); see also Mohr, supra note 23, at 111 ("After 1840 the frequency of malpractice actions shot suddenly upward, and well-established physicians, not charlatans, found themselves the targets of an almost revolutionary and certainly unprecedented surge in malpractice accusations.").

[FN26]. See De Ville, supra note 25, at 68 (arguing that "heroic" medical treatments were "the object of considerable derision and one of the main sources of public antipathy toward the profession"). Continental medicine in the early nineteenth century apparently was open to similar charges; discussing public mortality in France, Foderé asserted that standard medical treatments for children and adolescents often did more harm than good. See 5 F.E. Foderé, Traité de Médecine Légale et d'Hygiène Publique, ou de Police de Santé 84- 85 (2d ed. 1813).
Public sentiment sometimes posed an obstacle to medical progress: Doctors complained

that public opposition to the dissection of cadavers kept them at a disadvantage, by preventing them from improving their understanding of the human body. See De Ville, supra note 25, at 70 ("Medical societies and contemporary observers argued that physicians would be subject to malpractice suits if they did not understand the workings of the human body and yet were being denied the primary source of that knowledge."). In France, Foderé had proposed a chilling alternative method for obtaining medical knowledge: He advocated trying new remedies and operations on those condemned to death or to life imprisonment. See 6 Foderé, supra, at 427 ("To risk such experiments on free men goes against justice and humanity, and it would conflict with neither of those principles to do such things to criminals already condemned to death ...." (author's translation)).

[FN27]. See De Ville, supra note 25, at 100 ("Though unnecessary or incompetent amputations were seldom penalized, physicians who saved limbs with compound or complex fractures were regularly sued."); see also Mohr, supra note 23, at 114 ("Improved techniques and more careful training produced an advance; but because the consequences of the advance were often imperfect, those who tried to save limbs in difficult cases often found themselves being sued.").

[FN28]. Alfred S. Taylor, Medical Jurisprudence 320 (2d Am. ed. 1850); see also Henry F. Campbell, The President's Address, 4 JAMA 477, 484 (1885) ("Unavoidable deformities and disabilities remaining after the treatment of fractures and dislocations have been made the most frequent occasions for arraignment of the surgeon....").

[FN29]. As De Ville explains:
[B]y 1850 the number of physicians in some areas had increased to the point of a glut. If a malpractice suit destroyed a physician's career, there was always another doctor, or more, ready to take his place. In this situation, juries and judges were less likely to shelter physicians from unhappy, litigious patients.
De Ville, supra note 25, at 78.

[FN30]. See id. ("The surplus of physicians in many parts of the country... subverted the medical profession's status and gave rise to malpractice suits by engendering and exacerbating competition among regular practitioners."). A physician speaking at the Medico-Legal Society of New York in 1871 acknowledged this suspicion:
Putting aside the loud boasters, the selfish, inconsiderate, and even ignorant men to be found in the profession, whose conduct may sometimes deserve the infliction of a lawsuit, I do not hesitate to assert that a very large proportion of actions for malpractice brought against medical practitioners are instigated by unworthy motives. Some, indeed, go further, asserting that were the secret of such cases known it would unveil the promptings of malevolent professional rivals. This may be true, although I prefer to think not to the extent asserted.
James O'Dea, The Sphere, Rights, and Obligations of Medical Experts, reprinted in Papers Read Before the Medico-Legal Society of New York, from its Organization 403, 440 (1st series, 3d illustrated ed. 1889).

[FN31]. See De Ville, supra note 25, at 92 ("Malpractice suits were, in part, an expression of a transformed view of the human body and an unprecedented concern for physical well-being."); Mohr, supra note 23, at 112.

[FN32]. De Ville argues:
The two essential preconditions for the rise of malpractice suits were the dissolution of community stigmatization of certain types of litigation and the decline in belief in the concept of providence that held misfortune to be an expression of divine will. Without these two underlying, long-term developments, the widespread prosecution of physicians would have been inconceivable.
De Ville, supra note 25, at 115.

[FN33]. See De Ville, supra note 25, at 103 (noting, with respect to the problem of "unrealistic expectations," that "[p]hysicians and medical writers began to believe that mechanical, standardized treatment yielded consistent, faultless cures").

[FN34]. Elwell, supra note 24, at 75.

[FN35]. Id. at 561. English authors concurred:
It will be obvious that a serious responsibility is thrown on practitioners, who undertake the management of a case of criminal wounding. Any deviation from common practice should therefore be made with the greatest caution, since novelties in practice will, in the event of death, form one of the best grounds of defence in the hands of a prisoner's counsel.
Taylor, supra note 28, at 259; see also W. Bathurst Woodman & Charles Meymott Tidy, Forensic Medicine and Toxicology, A Comprehensive Work on Medical Jurisprudence 635 (1882) ("In criminal trials it is often sought to fix the responsibility of a terminal erysipelas, etc., after trephining, or similar operations, upon the surgeon who operates, rather than upon the assailant whose violence caused the original injury.").

[FN36]. European physicians made similar assertions. See 2 Johann Ludwig Casper, A Handbook of the Practice of Forensic Medicine, Based Upon Personal Experience 304 (George William Balfour trans., 3d ed. 1862) (stating that "perfectly groundless accusations" are often "made both against medical and non-medical men, dictated by ignorance, by wrath at a supposed overcharge for attendance, or in other cases entirely by a contemptible love of gain").

[FN37]. William A. Guy, Principles of Forensic Medicine 233 (1st Am. ed. 1845). This treatise was written by William A. Guy, an English physician and professor of forensic medicine. See id. at v. For the "American edition" of the treatise, Charles A. Lee, an American physician and professor, took up "the task of revising the text, correcting errors, and adapting the publication to the existing laws and institutions of" the United States. Id. at vi. Dr. Lee identified his additions to the text by means of brackets. See id. Unless otherwise specified, my references to this treatise are to the additions that were written by Dr. Lee.

[FN38]. John Ordronaux, The Jurisprudence of Medicine, in its Relations to the Law of Contracts, Torts, and Evidence, with a Supplement on the Liabilities of Vendors of Drugs 58 (1869).

[FN39]. See De Ville, supra note 25, at 43 ("Because so many malpractice plaintiffs had not paid their bills, physicians began to believe that their poorer patients were the most likely to sue."); Mohr, supra note 23, at 115 ("Many [physicians] thought that the vast majority of malpractice suits were initiated by poor patients either trying to escape paying for a job they considered less than perfect or trying to turn a misfortune into cash at the expense of a wealthy professional.").

[FN40]. See Mohr, supra note 23, at 37, 198.

[FN41]. Taylor, supra note 28, at 275.

[FN42]. See, e.g., id. (asserting, with respect to malpractice suits arising from obstetrical cases, that "much difference of opinion exists among the most eminent practitioners of midwifery respecting the treatment to be pursued in certain cases of difficulty").

[FN43]. A Canadian lawyer pointed out that advances in medical knowledge presented risks for the physician:
The medical man has ofttimes to sail between Scylla and Charybdis. While, on the one hand, he is bound to consult the attainable literature in his profession, and to diligently gather in... the experience of his confreres-- for in determining what is negligence, the improvements that are constantly taking place are always considered--at the same time he must not try new modes or methods too readily....
R. Vashon Rogers, Jr., The Law and Medical Men 71 (1884).

[FN44]. Elwell, supra note 24, at 37.

[FN45]. Id. at 47.

[FN46]. Id. at 29 ("The physician and attorney are not responsible for the errors of an enlightened judgment, where good judgments may differ."). European commentators made similar arguments. See, e.g., J. Briand & Ernest Chaudé, Manuel Complet de Médecine Légale, ou Résumé des Meilleurs Ouvrages Publiés Jusqu'a ce Jour sur cette Matière et des Jugements et Arrêts les Plus Récents, et Contenant un Traité Élémentaire de Chimie Légale 46 (8th ed. 1869) ("The tribunals ..., then, should not recognize liability, either criminal or civil, unless it is well established that the doctor acted with unforgivable thoughtlessness or carelessness, or that he showed ... crass ignorance ...." (author's translation)).

[FN47]. Woodman & Tidy, supra note 35, at 635.

[FN48]. George Ryerson Fowler, Surgical Malpractice, in 2 Allan McLane Hamilton & Lawrence Godkin, A System of Legal Medicine 573, 575 (1894).

[FN49]. See Mohr, supra note 23, at 117-18.

[FN50]. Elwell, supra note 24, at 7. This problem appears to have persisted. Writing in 1871, James O'Dea noted the frequency of malpractice suits arising from "the treatment of fractures, amputations, and dislocations," and he asserted that "honest and capable surgeons have seriously debated the necessity of retiring from a profession whose emoluments are so scanty in comparison with its risks." O'Dea, supra note 30, at 441.

[FN51]. See De Ville, supra note 25, at 101-02 ("Faced with a difficult fracture, an unethical or unscrupulous doctor might recommend a dramatic amputation to portray himself as a courageous surgeon and, at the same time, sidestep the prospect of an imperfect result and possible malpractice charge.").

[FN52]. Elwell, supra note 24, at 9. Elwell himself did not think this measure would solve the malpractice problem; rather, he argued that the only solution was to "elevat[e] the standard of Medico-legal knowledge in the professions of Law and Medicine." Id.

[FN53]. Code of Ethics of the American Medical Association, reprinted in Ordronaux, supra note 38, at 233, 246.

[FN54]. O'Dea, supra note 30, at 440. The English authors Woodman and Tidy made a similar argument. Regarding dislocations, they asserted:
It is not possible, after some weeks or months, to say definitely in certain cases whether such and such injuries have occurred, as, particularly in the case of dislocations, all traces of the original accident may rapidly disappear. Professional men should therefore be cautious not to judge their brethren unfairly.
Woodman & Tidy, supra note 35, at 630. They proceeded to issue a broader warning about testifying for malpractice plaintiffs:
It may be said, referring to malapraxis generally, that no medical man should give an adverse opinion on the conduct or practice of a professional brother, without having all the facts of the case before him; and whatever opinion he may give at an inquest, or in a police court, he should be prepared to justify before the higher tribunals, as well as before the whole medical profession. It has happened, though we hope rarely, that a medical man in condemning the practice of a brother professional, has only shown his own ignorance of the progress of science in general, and of medical science in particular.
Id. at 636.

[FN55]. I am indebted to James Mohr's illuminating book for first alerting me to the fact that these issues surfaced in the nineteenth century as well as in the present time. See generally Mohr, supra note 23. Mohr provides an enlightening discussion of nineteenth century physicians' complaints about the adversary system and such physicians' proposals to alter that system. The issues of medical malpractice and medical expert testimony are two of several themes that Mohr explores in his book. Building upon Mohr's insights, and drawing upon both sources Mohr cites and other sources, I focus here upon physician critiques of adversarial procedures, and upon proposals to alter those procedures.

[FN56]. See id. at 89 ("In the United States... by mid-century, medicine had become an overtly unregulated, unlicensed, overcrowded, doctrinally incoherent, and fiercely competitive profession.").

[FN57]. As Mohr explains:
Since there were no functional licensing laws to regulate the practice of medicine, no formal educational requirements, and plenty of deep-seated disagreements over what constituted effective health care, American courts during the second quarter of the nineteenth century tended more and more often to err on the side of inclusion in medically related cases.
Id. at 100.

[FN58]. 2 Theodric Romeyn Beck & John B. Beck, Elements of Medical Jurisprudence 697 (6th ed., Thomas, Cowperthwait, & Co. 1838) (1823); see also Mohr, supra note 23, at 100 (discussing the same statement in earlier edition). This critique occurs in a paragraph discussing English judicial practices, as part of a general discussion of medical evidence. See 2 Beck & Beck, supra, at 697. The critique's application closer to home would likely have struck readers in the United States.

[FN59]. Ordronaux, supra note 38, at 137; see also W.J. Conklin, The Medical Expert, 3 Ohio Med. & Surgical J. 127, 134 (1878). "[T]he courts, under the present system of receiving experts' testimony, have no means of judging of the qualifications of a particular witness. His deportment upon the witness stand, and the reasons which he assigns for his opinions, only go to affect his credibility, not the question of admissibility." Id.

[FN60]. Expert Testimony, 9 Alb. L.J. 193, 193 (1874).

[FN61]. George W. Field, Field's Medico-Legal Guide for Doctors and Lawyers 13 (1887).

[FN62]. Ordronaux, supra note 38, at 137.

[FN63]. The view that lay people lacked the capacity to judge medical questions also underlay the proposal that coroners should have medical training. The American editor of Guy's treatise on forensic medicine asked: "Suppose an ignorant coroner be summoned to hold an inquest in case of death from mal-practice, such as Thompsonian, or Homoeopathic? Where is the knowledge which is to guide him to a safe decision, and interpose the shield of law and justice to the progress of ignorance and charlatanry?" Guy, supra note 37, at 7.

[FN64]. 5 N.Y. Med. & Physical J. 597, 607 (1826) (reviewing Letter to the Hon. Isaac Parker, Chief Justice, Supreme Court of the State of Massachusetts ("containing Remarks on the Dislocation of the Hip-joint, occasioned by the publication of a Trial, which took place at Machias, in the State of Maine, June 1824")) [hereinafter Review].

[FN65]. Id.

[FN66]. See Mohr, supra note 23, at 197.

[FN67]. T. Romeyn Beck, Annual Address Delivered Before the Medical Society of the State of New-York, Feb. 6, 1828, 7 N.Y. Med. & Physical J. 9, 25 (1828); see also Elwell, supra note 24, at 307 ("The facts upon which the medical witness may suddenly be called to give an opinion may be new to him... [and] there may be no time for much reflection, or for a reference to authority."). James Mohr provides an insightful discussion of Beck's 1828 address. See Mohr, supra note 23, at 95-99.

[FN68]. James Mohr points out: "Physicians... were testifying in an adversarial setting, where rebuttal and contradiction were considered normal, even essential. What lawyers viewed as a positive good, physicians took as unprofessional bullying." Mohr, supra note 23, at 98.

[FN69]. In 1885 Henry Campbell, who at the time was President of the American Medical Association, gave an example of the sort of insinuations that medical witnesses found so galling. He described a poisoning case in which the defense attorney did not attempt to cross-examine the prosecution's expert on the substance of his testimony; rather, defense counsel used his cross-examination to establish that in all the cases in which the prosecution's expert had tested for arsenic, he had found it. Defense counsel then argued to the jury, with respect to the expert: "'[H]e is the arsenic hunter and arsenic finder for his college, and, you see, he is a good one; he always finds the arsenic.'" The jury acquitted. Campbell, supra note 28, at 482-83.

[FN70]. Review, supra note 64, at 606. At approximately the same time, two noted English authors suggested the existence of similar problems in England. See 1 J.A. Paris & J.S.M. Fonblanque, Medical Jurisprudence 153 (1823) ("[W]e do not mean to arraign the present forms of examination in general, when we assert that some abuse in practice too frequently places the [medical] witness in as painful a situation, as if he were himself a criminal.").

[FN71]. Guy, supra note 37, at 5.

[FN72]. I. Ray, A Treatise on the Medical Jurisprudence of Insanity 567 (4th ed. 1860).

[FN73]. Address of Samuel D. Gross, M.D., LL.D., President of the Association, in 19 Transactions of the Am. Med. Ass'n 57, 62 (1868) [hereinafter Gross]; see also Mohr, supra note 23, at 53-54 (discussing Gross's interest in medical jurisprudence and mentioning Gross's 1868 address).

[FN74]. I. Ray, A Treatise on the Medical Jurisprudence of Insanity 59 (1838).

[FN75]. Edward C. Mann, A Treatise on the Medical Jurisprudence of Insanity xviii-xix

(1893).

[FN76]. Expert Testimony, supra note 60, at 193.

[FN77]. Woodman & Tidy, supra note 35, at 627.

[FN78]. Such problems were not unique to the United States. Discussing medical evidence in criminal cases, Paris and Fonblanque noted in 1823 that in
several of the more interesting trials,... the medical witness has evinced any thing rather than a well grounded acquaintance with the philosophical bearings of the question; and while he has endeavoured to conceal his ignorance under the veil of technical phraseology, he has artfully sought to shun the embarrassments it might create by a display of bold and sweeping assertions, alike hostile to the discovery of truth, and the administration of justice.
Paris & Fonblanque, supra note 70, at 400.

[FN79]. See Beck, supra note 67, at 13-14.

[FN80]. Ray, supra note 74, at 58-59. Ordronaux agreed. See Ordronaux, supra note 38, at 164 ("The majority [of physicians are]... wholly inexperienced in insanity, and as such, incompetent to testify as experts in controversies upon this issue.").

[FN81]. Ray, supra note 74, at 59.

[FN82]. Elwell, supra note 24, at 300.

[FN83]. Report on Recommendations and Suggestions Contained in President's Address, 19 Transactions of the Am. Med. Ass'n 75, 77-78 (1868) [hereinafter Report].

[FN84]. 2 Beck & Beck, supra note 58, at 695. The English commentator Alfred Taylor offered a similar view concerning testimony on wounds: "A difference of opinion will often exist among medical witnesses as to whether a particular wound was or was not dangerous to life. Unanimity can only be expected when the judgment and experience of the witnesses are equal." Taylor, supra note 28, at 186.

[FN85]. See Mohr, supra note 23, at 198 (noting that "the process of eliciting medical evidence [made] physicians look scientifically weak, internally divided, and dangerously unprofessional").

[FN86]. Guy, supra note 37, at 474 (internal quotation marks omitted).

[FN87]. Conklin, supra note 59, at 128.

[FN88]. Id. at 128-29.

[FN89]. 1 Hamilton & Godkin, supra note 48, at 23.

[FN90]. Similar issues arose in the English system. Guy's 1845 treatise warned:
Medical men are sometimes called on to give evidence for the prosecution, at other times for the defence. In such cases there is great necessity for caution; and it is obvious that no medical man can be justified in consenting to appear for either party, until, having heard all the facts on which his opinion must be formed, he can conscientiously give evidence in favour of the party for whom he is retained.
Guy, supra note 37, at 10. (Unlike my other quotations from this treatise, this passage is one from the English edition, rather than an addition by the treatise's American editor.)

[FN91]. Beck, supra note 67, at 24 (citations omitted); see also Mohr, supra note 23, at 98 (discussing a portion of this passage).

[FN92]. Guy, supra note 37, at 474 (internal quotation marks omitted).

[FN93]. David Humphreys Storer, Medical Jurisprudence, 3 Med. Comm. Mass. Med. Soc'y 131, 140 (1851).

[FN94]. Gross, supra note 73, at 61.

[FN95]. Beck, supra note 67, at 26; see also Mohr, supra note 23, at 99 (discussing this passage). If a physician could show that a medical witness had maliciously impugned his competence, he might be able to recover damages for libel, despite the privilege that normally attached to testimony in court. See White v. Carroll, 42 N.Y. 161, 164-67 (1870). A jury awarded White, a homoeopathic physician, $100 in damages against Carroll, an allopathic physician, because Carroll had testified that White was "a quack" and had asserted, on the witness stand, that "I would not call him a physician." Id. at 165.

[FN96]. See Mohr, supra note 23, at 197-98 (observing that "physicians risked their personal reputations each time they took the witness stand as an expert").

[FN97]. Storer, supra note 93, at 137; see also Mohr, supra note 23, at 103- 04 (discussing Storer's address and his prior career).

[FN98]. Elwell, supra note 24, at 296.

[FN99]. See Mohr, supra note 23, at 90-92, 199-200.

[FN100]. See, e.g., Elwell, supra note 24, at 581; Marshall D. Ewell, A Manual of Medical Jurisprudence for the Use of Students at Law and of Medicine 9-15 (1887); Guy, supra note 37, at 5; Ordronaux, supra note 38, at 249-50; Henry Wade Rogers, The Law of Expert Testimony 254-64 (1883); Beck, supra note 67, at 30-31.

[FN101]. See Mohr, supra note 23, at 12-13, 42, 48-51 (discussing French influence); id. at 231-32 (discussing German influence). T.R. Beck, for example, wrote approvingly of Foderé's treatise on medical jurisprudence. Id. at 17.

[FN102]. Mohr, supra note 23, at 50-51. An observer of the French system might have noted, however, that French medical commentators expressed some dissatisfaction with the treatment of expert testimony. See, e.g., 2 Foderé, supra note 26, at 227-28 (discussing medical testimony on survival and order of death) ("It is quite true that often the men of the law pay too much attention to doctors, and that often they don't pay enough attention to them ...." (author's translation)). Mohr observes that the French approach to expert opinions
did not work as well as its American admirers believed it did. The French system was open to influence-peddling and corruption; sanction was often given to the opinions of physicians who did not merit the confidence of the courts...; and the structure was constantly in need of tinkering and reform throughout the century.
Mohr, supra note 23, at 51.

[FN103]. Thus, for example, Henry Wade Rogers' 1883 treatise on expert testimony discussed Casper's description of the German expert system. See Rogers, supra note 100, at 56.

[FN104]. 3 Casper, supra note 36, at 178 (1864).

[FN105]. See id. at 178-79. French commentators shared some of Casper's concerns. Briand and Chaudé noted that good practitioners did not necessarily make good experts, and discussed the need for training and selection of men in each locale to be medical experts. See Briand & Chaudé, supra note 46, at 20.

[FN106]. 3 Casper, supra note 36, at 179 (1864). However, Casper noted with disapproval a trend toward calling other, nonofficial, experts to testify "either along with the official physician or to his complete exclusion." Id. at 181.
The first volume of Casper's work gave more detail on the system for reporting the results of autopsies. Autopsy reports went through two rounds of review and revision--first by referees at a provincial medical college and then by referees at a centralized scientific commission. See 1 Casper, supra note 36, at 233-34 (1861). However, written reports were generally not admissible at trial, and it was seen as impracticable for a reviewing expert to appear to testify live. See id. at 234-35. Instead, a local physician could be "required to defend the [opinion] vivâ voce at the trial." Id. at 235. Casper complained that juries were not bound by the reports and "often enough" reached verdicts "most remarkably and diametrically opposed to the medical opinion of the case." Id. at 234.

[FN107]. Review, supra note 64, at 607; see also Mohr, supra note 23, at 84 (quoting part of this passage).

[FN108]. Ray, supra note 74, at 60 (citation omitted).

[FN109]. Beck, supra note 67, at 11.

[FN110]. Id. at 14; see also Mohr, supra note 23, at 84-87 (quoting this passage and the

passage cited in note 111, infra, and discussing Beck's proposal for "[s]tate-supported medical jurisprudence").

[FN111]. Beck, supra note 67, at 15. John Beck, T.R. Beck's brother, took a similar view. In the chapter on infanticide that he contributed to his brother's treatise, John Beck detailed a number of expert reports from French cases, and explained: "I have selected them not merely with the view of illustrating the doctrines previously advanced, but of showing the manner in which criminal cases are investigated and reported upon, on the continent of Europe. It is to be hoped that a similar mode may ere long, be adopted in this country." 1 Beck & Beck, supra note 58, at 439.

[FN112]. Ordronaux, supra note 38, at 163. Likewise, a physician speaking in 1871 argued that expert witnesses should be better educated, as European experts were, that they should be less partisan, and that "the court alone should call and examine the medical experts." O'Dea, supra note 30, at 422-23, 428-29.

[FN113]. Ordronaux, supra note 38, at 190.

[FN114]. 2 Beck & Beck, supra note 58, at 963 (C.R. Gilman rev., 11th ed., J.B. Pippincott & Co. 1860) (1823).

[FN115]. Id. at 970-71. Hamilton and Godkin, writing in 1894, took a stronger position: They suggested that physicians should "refuse to testify unless before doing so they can meet in conference with the expert witnesses to be called on the other side of the case, and have an interchange of views." Hamilton & Godkin, supra note 89, at 24.

[FN116]. Gross, supra note 73, at 62. The American Medical Association committee appointed to consider Gross's proposal reported favorably on it. See Report, supra note 83, at 78 (stating that under current circumstances, "we know of no remedy to meet the case except by the adoption of the plan recommended by our President"). In his discussion of the AMA, James Mohr quotes and discusses Gross's proposal, and the committee's response. See Mohr, supra note 23, at 227.

[FN117]. Gross, supra note 73, at 62-63.

[FN118]. Id.

[FN119]. Id. at 63. A letter to the Albany Law Journal in 1874 made a similar proposal: "Why not authorize the court to associate with itself an expert, who, jointly with the judge, would preside at the trial, direct and control the examination of the witnesses, and sum up at the close, before the summing up by the law judge?" C. Goepp, Letter to the Editor, Experts in Judicial Proceedings, 9 Alb. L.J. 146, 146-47 (1874), cited in Mohr, supra note 23, at 202.

[FN120]. See Mohr, supra note 23, at 115 (discussing an 1860 proposal for "medical juries to try malpractice accusations").

[FN121]. Guy, supra note 37, at 474. Taylor made a similar proposal with respect to malpractice proceedings: "There is often great injustice in these proceedings, and the mischief can only be remedied by referring the facts to a medical tribunal, which alone should be competent to decide whether or not unskillfulness had really been shown in the management of a case." Taylor, supra note 28, at 320.

[FN122]. Expert Testimony in Judicial Proceedings, 9 Alb. L.J. 122, 122 (1874); see also Mohr, supra note 23, at 202 (citing this source).

[FN123]. See Mohr, supra note 23, at 173-74 (discussing proposals for "lunacy commissions").

[FN124]. Elwell, supra note 24, at 423 (internal quotation marks omitted).

[FN125]. See Ray, supra note 74, at 64. Ray maintained that this approach would be far superior to "summoning medical witnesses to the trial--most of whom have but very imperfect notions of the disease, and probably have not had the least communication with the accused,--and forcing out their evidence, amid the embarrassment produced by the queries of ingenious counsel." Id. at 63.

[FN126]. Charles Tidy, an English surgeon whose medico-legal treatise was published in the United States, avoided the question "[w]hether an unscientific tribunal is capable, or should be required to decide scientific differences," but argued that so long as capable lawyers cross-examine honest experts, "no better way... could possibly be devised to arrive at the truth." 1 Charles Meymott Tidy, Legal Medicine 14-15 (1882).

[FN127]. See Mohr, supra note 23, at 106-08 (discussing Thurman's address).

[FN128]. Hon. A. G. Thurman, Annual Address, Delivered at Commencement of Starling Medical College, March 3, 1857, 9 Ohio Med. & Surgical J. 347, 354 (1857).

[FN129]. Id.

[FN130]. Id. Mohr gives particular attention to the passages quoted in the text accompanying notes 130-34. See Mohr, supra note 23, at 107.

[FN131]. Thurman, supra note 128, at 354.

[FN132]. Id. at 354-55.

[FN133]. Id. at 355.

[FN134]. Id.

[FN135]. Rogers, supra note 100, at 56.

[FN136]. Id. at 57.

[FN137]. Id. at 57-58.

[FN138]. Id.

[FN139]. Mann, supra note 75, at xix.

[FN140]. 1 S.V. Clevenger, Medical Jurisprudence of Insanity, or Forensic Psychiatry 108 (1898).

[FN141]. Id.

[FN142]. See Mohr, supra note 23, at 174-75, 178-79. Mohr notes that the New York innovation "was [not] as radical a departure as it appeared to be," because
[t]he commission law authorized the experts to make a determination in criminal cases only when the defendant made no other plea than insanity. Moreover, if the defense disagreed with the commission's ruling, the defendant could demand a regular jury trial to redetermine his or her status in the normal fashion.
Id. at 174.

[FN143]. See Mohr, supra note 23, at 215-18.

[FN144]. Mohr, supra note 23, at 252.

[FN145]. Even if active reform efforts petered out by the turn of the century, commentators continued to discuss reform proposals through the early twentieth century. See Neal C. Hogan, Unhealed Wounds: Medical Malpractice in the Twentieth Century 80-86 (2003) (discussing commentary on medical expert witnesses and proposals for "a commission of doctors which the courts could refer to for expertise in medical matters").

[FN146]. See De Ville, supra note 25, at 189-90.

[FN147]. See id. at 204-05.

[FN148]. See Hogan, supra note 145, at 34-37.

[FN149]. See id. at 35.

[FN150]. See id. at 39, 45.

[FN151]. See Paul Starr, The Social Transformation of American Medicine 102 (1982).

[FN152]. See id. at 109-10.

[FN153]. Id. at 123.

[FN154]. See id. at 134-40.

[FN155]. Id. at 81.

[FN156]. See id. at 111; see also De Ville, supra note 25, at 210-13.

[FN157]. Starr, supra note 151, at 111.

[FN158]. See Hogan, supra note 145, at 38, 100-01; see also id. at 82 ("Strong pressure could be brought to bear against those physicians who chose to testify for plaintiffs.").

[FN159]. Id. at 99.

[FN160]. Carl F. Ameringer, State Medical Boards and the Politics of Public Protection 14 (1999).

[FN161]. Id. at 22.

[FN162]. Id. at 29; see also Hogan, supra note 145, at 106, 177 n.231 (discussing the use of the term "conspiracy of silence" by Melvin Belli, a prominent plaintiff's lawyer).

[FN163]. See Ameringer, supra note 160, at 29-30; Hogan, supra note 145, at 110, 135-37.

[FN164]. Robert C. Derbyshire, How Effective is Medical Self-Regulation?, 7 Law & Hum. Behav. 193, 196 (1983).

[FN165]. Timothy Stoltzfus Jost, Oversight of the Quality of Medical Care: Regulation, Management, or the Market?, 37 Ariz. L. Rev. 825, 862-64 (1995) (citations omitted).

[FN166]. See, e.g., Timothy S. Hall, Bargaining with Hippocrates: Managed Care and the Doctor-Patient Relationship, 54 S.C. L. Rev. 689, 694-95 (2003) (noting that "[m]anaged care characteristically imposes external controls on physicians' spending decisions" and that it "also seeks to encourage physicians to internalize the ethos of cost-cutting and cost-effective medical practice" (citation omitted)).

[FN167]. The development--in the late 1950s to early 1970s--of the modern legal notion of "informed consent" played a key role in reorienting the profession from a model of deference to physicians' judgment to a model of patient choice. See Ruth R. Faden & Tom L. Beauchamp, A History and Theory of Informed Consent 125-32 (1986). As Faden and Beauchamp explain:
Physicians had heretofore considered the physician-patient relationship by beginning from the patient's submission to the physician's professional beneficence. The law enlarged that perspective by viewing the relationship within a wider social framework,

emphasizing instead that patients voluntarily initiate the relationship and have the right to define its boundaries to fit their own ends.
Id. at 142-43. More broadly, Marc Rodwin has described ways in which "the movements involving... patients' rights[,] medical consumerism[,] women's health[,] and disability rights... have fostered the ideal of serving patients, promoting [patient] autonomy, and promoting a more responsible and humane health care system," though Rodwin also concludes that these movements "[have] had limited success" in achieving these goals. Marc A. Rodwin, Patient Accountability and Quality of Care: Lessons from Medical Consumerism and the Patients' Rights, Women's Health and Disability Rights Movements, 20 Am. J.L. & Med. 147, 150 (1994).

[FN168]. Mohr, supra note 23, at 252.

[FN169]. See Gold, supra note 18, at 145.

[FN170]. Admittedly, it would be useful to have more empirical data than we now possess. Cf. Peter H. Huang, Lawsuit Abandonment Options in Possibly Frivolous Litigation Games, 23 Rev. Litig. 47, 49 (2004) (noting the "demand for more empirical research and work about civil procedure and litigation"). However, as I discuss in Part II, the existing data provide a number of important insights.

[FN171]. Some of the discussion in this Part is drawn from my report for the Pew Charitable Trusts' Project on Medical Liability in Pennsylvania. See Catherine T. Struve, Expertise in Medical Malpractice Litigation: Special Courts, Screening Panels, and Other Options (2003).

[FN172]. See Paul C. Weiler et al., A Measure of Malpractice: Medical Injury, Malpractice Litigation, and Patient Compensation 69-70 (1993).

[FN173]. Id. at 71.

[FN174]. See id. Reviewing the study's findings, Randall Bovbjerg observed: "This mismatch... is not fully consistent with information from studies of closed claims, which are more appropriate than hospital records for examining the accuracy of liability processes. Claims files have more detail about injuries, and closed files naturally cover the full resolution of each case." Randall R. Bovbjerg, Medical Malpractice: Research and Reform, 79 Va. L. Rev. 2155, 2163 (1993) (book review) (citation omitted).

[FN175]. David M. Studdert et al., Negligent Care and Malpractice Claiming Behavior in Utah and Colorado, 38 Med. Care 250, 253-55 (2000).

[FN176]. These figures are based on a nationwide sample of claims closed in 1984. See U.S. Gen. Accounting Office, Medical Malpractice: Characteristics of Claims Closed in 1984, at 37, 82 (1987).

[FN177]. See id.

[FN178]. Neil Vidmar, Medical Malpractice and the American Jury: Confronting the Myths About Jury Incompetence, Deep Pockets, and Outrageous Damage Awards 38 (1995). Interestingly, there is some evidence that medical malpractice plaintiffs who try their claims before a judge tend to do better than those who try their claims before a jury. Kevin Clermont and Theodore Eisenberg studied data from 1979 to 1989 concerning a number of types of cases litigated in federal court. See Kevin M. Clermont & Theodore Eisenberg, Trial by Jury or Judge: Transcending Empiricism, 77 Cornell L. Rev. 1124, 1133 (1992). For thirteen types of cases, Clermont and Eisenberg compared the plaintiff win rate in cases tried before a judge with the plaintiff win rate in cases tried before a jury. See id. at 1134, 1136-37. They found that in medical malpractice cases tried before a judge, the plaintiff win rate was .50, whereas in medical malpractice cases tried before a jury, the plaintiff win rate was .29. See id. at 1137. Of course, this difference in win rates does not prove that judges are more favorable to malpractice claimants than juries are, because the difference in outcomes may be due to differences between the cases tried before a judge and the cases tried before a jury. See id. at 1162-66 (considering possible reasons for differences between the two sets of cases).

[FN179]. See Vidmar, supra note 178, at 83-92; Samuel R. Gross & Kent D. Syverud, Getting to No: A Study of Settlement Negotiations and the Selection of Cases for Trial, 90 Mich. L. Rev. 319, 360-66 (1991); Keith N. Hylton, An Asymmetric-Information Model of Litigation, 22 Int'l Rev. L. & Econ. 153, 165 (2002) (positing that "win rates will be less than 50 percent in regimes in which the legal test requires an examination of the defendant's compliance and the defendant enjoys an informational advantage").

[FN180]. See Henry S. Farber & Michelle J. White, A Comparison of Formal and Informal Dispute Resolution in Medical Malpractice, 23 J. Legal Stud. 777, 778 (1994) [hereinafter Farber & White, Dispute Resolution]; Henry S. Farber & Michelle J. White, Medical Malpractice: An Empirical Examination of the Litigation Process, 22 RAND J. Econ. 199, 200 (1991) [hereinafter Farber & White, Empirical Examination].

[FN181]. In many instances, patients may simply want to know why they suffered an adverse result, and may drop their claims (without filing suit) after gaining that information. Other data support the theory that a desire for information can lead people to assert malpractice claims. For example, in a study of birth-related injuries and deaths in Florida, researchers found that parents were more likely to file a malpractice claim if they had not previously been informed that there might be difficulties with the baby. See Frank A. Sloan & Chee Ruey Hsieh, Injury, Liability, and the Decision to File a Medical Malpractice Claim, 29 Law & Soc'y Rev. 413, 427 (1995).

[FN182]. See Farber & White, Empirical Examination, supra note 180, at 200.

[FN183]. See Thomas B. Metzloff, Researching Litigation: The Medical Malpractice Example, Law & Contemp. Probs., Autumn 1988, at 199, 204.

[FN184]. See Patrick J. Kelley & Laurel A. Wendt, What Judges Tell Juries About

Negligence: A Review of Pattern Jury Instructions, 77 Chi.-Kent L. Rev. 587, 595 (2002).

[FN185]. See id. at 606.

[FN186]. See Philip G. Peters, Jr., The Quiet Demise of Deference to Custom: Malpractice Law at the Millennium, 57 Wash. & Lee L. Rev. 163, 165-66 (2000).

[FN187]. See id. at 170.

[FN188]. See Philip G. Peters, Jr., The Role of the Jury in Modern Malpractice Law, 87 Iowa L. Rev. 909, 920-21 (2002).

[FN189]. See Mark A. Hall, The Defensive Effect of Medical Practice Policies in Malpractice Litigation, Law & Contemp. Probs., Winter & Spring 1991, at 119, 127.

[FN190]. See Tim Cramm et al., Ascertaining Customary Care in Malpractice Cases: Asking Those Who Know, 37 Wake Forest L. Rev. 699, 726 (2002) (advocating the use of "surveys of a relevant population of physicians to determine customary (and, if desired, appropriate or reasonable) care"); Mark A. Hall et al., Measuring Medical Practice Patterns: Sources of Evidence from Health Services Research, 37 Wake Forest L. Rev. 779, 779 (2002) (discussing "sources of evidence from the field of health services research that might be used to establish the standard of care in medical malpractice cases"); William Meadow & Cass R. Sunstein, Statistics, Not Experts, 51 Duke L.J. 629, 631 (2001).

[FN191]. See Philip G. Peters, Jr., Empirical Evidence and Malpractice Litigation, 37 Wake Forest L. Rev. 757, 772 (2002) (noting evidence that "physician practices vary widely, even within narrow geographic limits").

[FN192]. See Cramm et al., supra note 190, at 704-05.

[FN193]. See William Meadow, Operationalizing the Standard of Medical Care: Uses and Limitations of Epidemiology to Guide Expert Testimony in Medical Negligence Allegations, 37 Wake Forest L. Rev. 675, 681 (2002).

[FN194]. Cf. Troyen A. Brennan, Causal Chains and Statistical Links: The Role of Scientific Uncertainty in Hazardous-Substance Litigation, 73 Cornell L. Rev. 469, 490 (1988) (noting, with respect to toxic tort cases, that "[t]he scientific association between a toxic substance and injury to a person relies on probabilistic evidence: epidemiological studies and statistical associations" (citation omitted)).

[FN195]. See Randall R. Bovbjerg, Urban Inst., Medical Malpractice: Problems and Reforms 4 (1995) ("New harm caused by treatment can be hard to tell from normal variation in harm attending the underlying illness or injury.").

[FN196]. See, e.g., Edith Greene & Brian Bornstein, Precious Little Guidance: Jury Instruction on Damage Awards, 6 Psychol., Pub. Pol'y, & L. 743, 745 (2000) (noting that "calculations [of economic damages] must take into account forecasts about future medical care needs, available job opportunities, and projected life expectancies").

[FN197]. See id.

[FN198]. See id.

[FN199]. See Thomas H. Koenig & Michael L. Rustad, In Defense of Tort Law 136 (2001).

[FN200]. 293 F. 1013 (D.C. Cir. 1923); see also Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 587 (1993) (holding, with respect to litigation in federal courts, that "the Frye test was superseded by the adoption of the Federal Rules of Evidence").

[FN201]. See Frye, 293 F. at 1014.

[FN202]. See, e.g., Samuel R. Gross & Jennifer L. Mnookin, Expert Information and Expert Evidence: A Preliminary Taxonomy, 34 Seton Hall L. Rev. 141, 148 (2003), (noting that the Frye standard "pass[es] the buck back to the expert field itself, and accept[s] the standards it imposes on itself").

[FN203]. 509 U.S. at 579.

[FN204]. See Arti K. Rai, Specialized Trial Courts: Concentrating Expertise on Fact, 17 Berkeley Tech. L.J. 877, 890 (2002) ("The exacting requirements that Daubert and its progeny impose on lay judges have been the subject of considerable controversy.").

[FN205]. Daubert, 509 U.S. at 593-94.

[FN206]. Sophia I. Gatowski et al., Asking the Gatekeepers: A National Survey of Judges on Judging Expert Evidence in a Post-Daubert World, 25 Law & Hum. Behav. 433, 433 (2001).

[FN207]. Id.

[FN208]. Shuman, supra note 12, at 280.

[FN209]. Id. at 280-81 (citations omitted); see also supra note 190 (listing sources that propose empirical methods for ascertaining medical custom).

[FN210]. Shuman, supra note 12, at 281.

[FN211]. Current indictments of jury performance are not limited to the medical malpractice context. See, e.g., Clermont & Eisenberg, supra note 178, at 1127 (noting a

popular perception, with respect to personal injury lawsuits, that "[j]uries... find liability when judges would not,... grant higher awards than judges, and... grant inappropriate punitive damages awards" (citations omitted)); Arthur R. Miller, The Pretrial Rush to Judgment: Are the "Litigation Explosion," "Liability Crisis," and Efficiency Clichés Eroding Our Day in Court and Jury Trial Commitments?, 78 N.Y.U. L. Rev. 982, 988 (2003) (noting tort reformers' propensity to "characteriz[e] juries as unsophisticated bodies more concerned with compensating sympathetic victims than with administering consistent justice").

[FN212]. For example, one set of researchers surveyed physicians who practiced in neonatal intensive care units in 1993. See William Meadow et al., Physicians' Experience with Allegations of Medical Malpractice in the Neonatal Intensive Care Unit, Pediatrics, May 1997, at http:// www.pediatrics.org/cgi/content/full/99/5/e10. The researchers asked the respondents about the respondents' personal experiences with malpractice claims. The results were dramatic:

On a scale of 1 to 4 (4 being most reasonable) the median assessment of the reasonableness of malpractice allegations was 1, mean 1.2. On a scale of 1 to 4 (4 being the highest) the median assessment of effectiveness of the current system in identifying true malpractice was 1, mean 1.4.

Id. The study relied on the respondent physicians' perceptions of the claims with which the respondents had been personally involved, and did not attempt to assess independently the accuracy of the respondents' perceptions. Although the study thus does not provide an objective assessment of the malpractice litigation system, the study does provide a vivid illustration of physicians' perceptions of that system.

[FN213]. See, e.g., Richard E. Anderson, Billions for Defense: The Pervasive Nature of Defensive Medicine, 159 Archives Internal Med. 2399, 2400 (1999) ("[P]hysicians are so averse to malpractice suits that nearly all clinical judgments are influenced."); Press Release, American Medical Association President-elect, Donald J. Palmisano, AMA Supports Health Act to Bring Common Sense to Our Liability System (Feb. 6, 2003) ("In crisis states, ob-gyns have been forced to stop delivering babies, trauma centers have closed, and physicians are grappling with how they can continue to provide other high-risk procedures."), at http://www.ama-assn.org/ama/pub/article/1617-7251.html.

[FN214]. Joe S. Cecil et al., Citizen Comprehension of Difficult Issues: Lessons From Civil Jury Trials, 40 Am. U. L. Rev. 727, 756 (1991).

[FN215]. See id. at 766-72.

[FN216]. See id. at 756-60.

[FN217]. See Jeffrey J. Rachlinski, A Positive Psychological Theory of Judging in Hindsight, 65 U. Chi. L. Rev. 571, 587-88 (1998).

[FN218]. See id. at 574, 612. Rachlinski notes that the comparative negligence doctrine may reduce the extent to which juror hindsight bias favors plaintiffs, because the bias

may also make jurors more likely to find the plaintiff partially responsible for the poor outcome. See id. at 594-95. However, malpractice cases may be less likely than other types of personal injury tort suits to support a comparative negligence defense, because in many malpractice cases the patient played a passive role in the treatment. Thus, to the extent that viable comparative negligence arguments are less frequently available to medical malpractice defendants than to other tort defendants, the hindsight bias may have a somewhat stronger systematic effect than it otherwise would.

[FN219]. See id. at 595.

[FN220]. Cecil et al., supra note 214, at 753 (citation omitted).

[FN221]. By contrast, at least one study suggests that parties' settlement decisions may fail to reflect actual liability. In a follow-up to the Harvard study of New York hospitals, researchers examined fifty-one malpractice claims. See Troyen A. Brennan et al., Relation Between Negligent Adverse Events and the Outcomes of Medical-Malpractice Litigation, 335 New Eng. J. Med. 1963, 1963 (1996). Forty-six of the claims were closed by the end of 1995; of these claims, only one went to a jury trial. See id. at 1964. Interestingly, although Brennan et al. had identified that case as involving an adverse event due to negligence, the jury found for the defendant. See id. at 1964-65. Of the other forty-five claims, twenty-four closed without payment and twenty-one settled with a payment by the defense. See id. at 1964. The researchers found that "neither the presence of an adverse event nor that of an adverse event due to negligence was associated with the outcome of the litigation"; rather, the reviewers' rating of the plaintiff's degree of disability "was the only significant predictor of payment." Id. at 1965.
Of course, this study tells us nothing about jury behavior, beyond the fact that in the one case that went to a jury, the jury found for the defendant despite evidence of negligence. It does provide some evidence of the defense's expectations of what a jury would do, because the defense's expectation of the risk of losing at trial will inform the decision to settle. However, the defense's willingness to pay to settle a case will also reflect the defense's projected cost of litigating a case to verdict, even if the defense expects to win at trial. In this regard, it is suggestive that in eight of the twenty-one cases where the plaintiff obtained a settlement, the settlement was less than $25,000--and as the authors note, "discussions with insurers indicated that settlements of less than $25,000 were nuisance settlements--settlements of claims thought to be without merit that could be resolved with a relatively small payment." Id. at 1967.

[FN222]. See Frank A. Sloan et al., The Dispute Resolution Process, in Suing for Medical Malpractice 153-86 (Frank A. Sloan et al. eds., 1993).

[FN223]. See id. at 166.

[FN224]. Some of these recoveries apparently occurred by means of a post-verdict settlement. See id.

[FN225]. See id. at 166-68; Neil Vidmar, The Performance of the American Civil Jury:

An Empirical Perspective, 40 Ariz. L. Rev. 849, 859 (1998).

[FN226]. See Sloan et al., supra note 222, at 166-68; Vidmar, supra note 225, at 859.

[FN227]. Farber & White, Dispute Resolution, supra note 180, at 786. Their review was limited to claims "that were resolved by mid-1993." Id.

[FN228]. See id. at 787.

[FN229]. See id.

[FN230]. Id.

[FN231]. Id. at 802. The figures provided by Farber and White are slightly confusing. They state that plaintiffs won four of the twenty-six cases that went to verdict. See id. They then specify that plaintiffs won none of the thirteen lawsuits in which care was rated "good," and that plaintiffs won "two of the four lawsuits with bad care and one of the four lawsuits with ambiguous care." Id. These more specific figures, however, seem to account for only three of the four plaintiff wins and twenty-one of the twenty-six verdicts cited by the authors.

[FN232]. See Bryan A. Liang, Assessing Medical Malpractice Jury Verdicts: A Case Study of an Anesthesiology Department, 7 Cornell J.L. & Pub. Pol'y 121, 125-27 (1997).

[FN233]. Id. at 129.

[FN234]. See id. at 129, 158-60 tbls. 2A-2F.

[FN235]. See David A. Schkade et al., Deliberating About Dollars: The Severity Shift, in Punitive Damages: How Juries Decide 43-44 (Cass R. Sunstein et al. eds., 2002).

[FN236]. See Shari Seidman Diamond et al., Juror Judgments About Liability and Damages: Sources of Variability and Ways to Increase Consistency, 48 DePaul L. Rev. 301, 316 (1998). On the other hand, another recent experimental study compared awards by six and twelve-person juries with awards by individuals, and found that the mean award by individuals was greater than the mean award by juries (though the difference was only weakly significant). See James H. Davis et al., Effects of Group Size and Procedural Influence on Consensus Judgments of Quantity: The Examples of Damage Award and Mock Civil Juries, 73 J. Personality & Soc. Psychol. 703, 714 (1997). The same study found that the mean twelve-person jury award was smaller than the mean six-person jury award. See id. at 713.

[FN237]. Diamond et al., supra note 236, at 317.

[FN238]. See Vidmar, supra note 225, at 897.

[FN239]. See, e.g., Frank A. Sloan & Chee Ruey Hsieh, Variability in Medical Malpractice Payments: Is the Compensation Fair?, 24 Law & Soc'y Rev. 997, 1019, 1025 (1990).

[FN240]. In their jury experiment, Diamond, Saks and Landsman found that the amounts juries awarded for pain and suffering were about twice as variable as the juries' awards for economic damages. See Diamond et al., supra note 236, at 317. Likewise, in a study of actual jury verdicts in personal injury cases in Florida and Kansas City during 1973-1987, Randall Bovbjerg, Frank Sloan, and James Blumstein found that awards of noneconomic damages were more variable than total awards. See Randall R. Bovbjerg et al., Valuing Life and Limb in Tort: Scheduling "Pain and Suffering," 83 Nw. U. L. Rev. 908, 937 tbl. 3 (1989).

[FN241]. Though each of these practices has potential drawbacks, each might help to improve jurors' understanding and retention of relevant evidence. See Cecil et al., supra note 214, at 768-69.

[FN242]. See Vidmar, supra note 178, at 197-98, 247. One treatise designed for use by medical malpractice defense lawyers advises defense lawyers to put in evidence on damages; the authors state that "[p]ost-verdict interviews... with jurors who heard a full damages defense presented by economic experts called by the defense... revealed that jurors rarely felt that the defense was conceding liability by offering an alternative damages presentation." Miles J. Zaremski & Frank D. Heckman, Reengineering Healthcare Liability Litigation 287 (1997).

[FN243]. As noted, support for medical screening panels arises partly from criticism of the performance of lay judges and juries in handling medical questions. In this respect, the panel proposals somewhat resemble proposals to send complex scientific questions to a "science court" composed partly or wholly of scientists. See Brennan, supra note 11, at 10-19 (reviewing proposals for, and examples of, "science courts" and "science panels"); see also James A. Martin, The Proposed "Science Court," 75 Mich. L. Rev. 1058, 1069 (1977) (advocating experimentation with a "science court" to aid "Congress or the Executive... in the determination of global policy issues").

[FN244]. Cf. Glen O. Robinson, The Medical Malpractice Crisis of the 1970s: A Retrospective, Law & Contemp. Probs., Spring 1986, at 5, 25 (discussing 1970s legislative initiatives to address medical malpractice, and stating that "[t]he goal in establishing... screening panels was to improve the quality of fault-finding by the system and thus both to discourage the bringing of questionable claims and to encourage the settlement of valid ones"). In addition, panels might be expected to address other problems of less interest to physicians but of concern to other commentators. Only a small portion of potential malpractice claims are ever asserted. Panels might address this underclaiming problem by encouraging the assertion of claims. Similarly, to the extent that some patients simply want to find out what went wrong, panels might provide a relatively low-cost venue for acquiring such information.

[FN245]. See supra text accompanying notes 120-25. Stakeholders in a number of states that adopted screening panel provisions have held positive views of them. For example, a mid-1980s study of interest groups in Indiana found that a physician group, the state bar association, and the state department of insurance "agreed that the panel process had decreased the number of claims that go to trial." U.S. Gen. Accounting Office, Medical Malpractice: Case Study on Indiana 12 (1986). The state medical association also believed that the panel system "decreases the time required to close claims," and a large insurance company "attributed its much lower legal costs to defend claims in Indiana to the panel process." Id. A similar survey of groups in Florida found varying assessments: An official of a trial lawyers' association recounted that plaintiffs' lawyers viewed the panels as biased (due to the presence of a physician on the panel) and thus that plaintiffs who lost before the panel tended to pursue the claim nonetheless. See U.S. Gen. Accounting Office, Medical Malpractice: Case Study on Florida 11-12 (1986). On the other hand, a physician group, a hospital association, a defense lawyers' association, and the state insurance department "strongly supported" reinstitution of panels. As one insurance company executive argued, "Our tort system cannot supply a jury that is truly comprised of the defendant's peers." Id. at 35. In New York, by contrast, the state bar association, a trial lawyers' association, and a hospital underwriters' association all opined that panels led to undesirable delay. See U.S. Gen. Accounting Office, Medical Malpractice: Case Study on New York 20 (1986).

[FN246]. See, e.g., James W. Hughes, The Effect of Medical Malpractice Reform Laws on Claim Disposition, 9 Int'l Rev. L. & Econ. 57, 65 (1989) (arguing that a screening panel's "impartial opinion should greatly improve the parties' information of the expected value of the claim, increasing the probability of a claim being settled"). In this respect, a screening panel might perform a function analogous to "early neutral evaluation." See, e.g., Thomas B. Metzloff, Alternative Dispute Resolution Strategies in Medical Malpractice, 9 Alaska L. Rev. 429, 453 (1992) (noting that Alaska's screening panel system is "akin to an early neutral evaluation process"); id. at 442 (stating that the goal of early neutral evaluation is "that the parties will benefit by the evaluator's neutral assessment of the value of the case and therefore reconsider their positions"). Some data suggest, however, that some physicians may wish to go to trial rather than settle, in order to attempt to clear their professional reputations. See Samuel R. Gross & Kent D. Syverud, Don't Try: Civil Jury Verdicts in a System Geared to Settlement, 44 UCLA L. Rev. 1, 58 (1996) (arguing that "the high rate of zero offers in medical malpractice cases is best explained by the desire of physicians for vindication at trial").

[FN247]. Cf. Deborah R. Hensler, Science in the Court: Is There a Role for Alternative Dispute Resolution?, Law & Contemp. Probs., Summer 1991, at 171, 193 (noting that "some ADR procedures, particularly early neutral evaluation, expert panels, and medical malpractice screening panels, may offer opportunities for expanding the role of neutral experts in the litigation process").

[FN248]. It should be noted that the evidence on panel performance provides only limited guidance for current policymaking. Of the available multistate studies that looked at panel performance, one analyzes data concerning 1992; four other studies analyze data

that extends into the mid-1980s; and the rest use data from the 1970s. These studies may be of limited predictive value to the extent that malpractice litigation has changed in recent years. Cf. William M. Sage, Understanding the First Malpractice Crisis of the 21st Century, in Health Law Handbook 1, 2 (Alice G. Gosfield ed., 2003) (noting that "[t]he current crisis is not simply a reprise of events in the 1970s or 1980s"). Moreover, some studies may not have captured the longer-term effects of panel systems: Because the first wave of panel system adoptions occurred in the mid-1970s, data from the 1970s only gives a sense of panels' short-term effects. Finally, some studies' results may have been blurred by the fact that researchers aggregated differing panel systems into one or only a few categories: Aggregating different systems into one variable (panel versus no panel), or even into a couple of variables (panel versus no panel, mandatory versus voluntary panels, admissible versus non-admissible panel findings), means that panel systems which produce particularly strong effects may be balanced out by panel systems with weaker systematic effects, such that the overall impact of panels looks weaker than it may, in fact, be in some states.

[FN249]. Alaska, Arizona, Connecticut, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Pennsylvania, Rhode Island, Tennessee, Utah, Virginia, Wisconsin, and Wyoming adopted panel provisions, but (as noted below) not all these states still have them. See infra note 250 and accompanying text.

[FN250]. Panel provisions have been repealed in Arizona, Nevada, New Jersey, New York, North Dakota, Rhode Island, and Tennessee. Illinois instituted two different panel systems, and repealed them both; however, to list Illinois as a repeal state might be viewed as double-counting, because both provisions were judicially invalidated prior to their repeal. Likewise, Florida repealed a panel provision in 1983, but the repeal followed the judicial invalidation of that provision in 1980. (Subsequent to the 1983 repeal, Florida adopted new provisions permitting procedures that have some aspects of a medical screening panel.)
Panel provisions have been invalidated in Florida, Illinois, Missouri, Pennsylvania, and Wyoming. See Aldana v. Holub, 381 So. 2d 231, 238 (Fla. 1980) (invalidating panel system because, as implemented, it deprived doctors of their right to mediation because proceedings in many cases did not conclude within the statutory deadline, and because extending that deadline would deprive malpractice plaintiffs of their right of access to the courts); Wright v. Cent. Du Page Hosp. Ass'n, 347 N.E.2d 736, 739 (Ill. 1976) (striking down panel provision because it mixed lay and judicial functions in violation of state constitution); Bernier v. Burris, 497 N.E.2d 763 (Ill. 1986) (striking down subsequent panel provision on similar grounds); Cardinal Glennon Mem'l Hosp. v. Gaertner, 583 S.W.2d 107, 110 (Mo. 1979) (holding that panel provision violated state constitutional right of access to courts); Mattos v. Thompson, 421 A.2d 190, 196 (Pa. 1980) (invalidating panel system because, as implemented, it resulted in such delays as to violate state constitutional right to a jury trial); Hoem v. State, 756 P.2d 780 (Wyo. 1988) (holding that panel provision violated state constitutional guarantee of equal protection).

[FN251]. See Jean A. Macchiaroli, Medical Malpractice Screening Panels: Proposed Model Legislation to Cure Judicial Ills, 58 Geo. Wash. L. Rev. 181, 186 (1990).

[FN252]. See id. at 188-89.

[FN253]. See id. at 189.

[FN254]. See id. at 189-90.

[FN255]. See id. at 190-91.

[FN256]. See id. at 193-94.

[FN257]. See id. at 194-96.

[FN258]. Admittedly, it is difficult to measure the accuracy of litigation results.

[FN259]. Researchers at the National Center for State Courts examined state court data on the frequency of medical malpractice claim dispositions in twenty-one states during 1992, and found that states with mandatory panels had a significantly greater rate of litigation. See Roger Hanson et al., What is the Role of State Doctrine in Understanding Tort Litigation?, 1 Mich. L. & Pol'y Rev. 43, 65-71 (1996). Because Hanson et al. focused only on litigation resolved in 1992, and did not examine changes over time, their results leave open the possibility that the causal link might run the other way--i.e., that states with higher litigation rates might have been more likely to adopt mandatory panel systems. Nonetheless, their finding is suggestive.
Shmanske and Stevens studied Arizona's panel system, using insurance claim file data from 1972-1979. See Stephen Shmanske & Tina Stevens, The Performance of Medical Malpractice Review Panels, 11 J. Health Pol., Pol'y & L. 525, 527 (1986). The 1972-1979 time period provided baseline data, because Arizona adopted its panel system in 1976. See id. at 528. Shmanske and Stevens looked only at claims files closed within two years after they were opened, and excluded claims for which the file was opened in a year other than that in which the incident occurred. See id. They found that the yearly rate of claim files opened per doctor was significantly higher after the start of the panel system than before. See id. at 529-33. They theorized that the increase they observed in claim frequency was due to the fact that panels "lower the expected cost to plaintiffs of acquiring information about the outcome of their lawsuits." Id. at 533.

[FN260]. For some claims that are resolved at or soon after the panel stage, the plaintiff's litigation costs may be relatively low. This would be particularly true if the plaintiff does not present an expert witness during the panel proceeding, and relies instead on the panel's expertise. Moreover, some plaintiffs might hope that if they succeed in front of the panel, they could call one or more panelists to testify at trial, instead of retaining an expensive expert witness. Thus, a claimant whose primary motive is to find a cause for an injury may take advantage of the panel procedure, perhaps pro se, in order to obtain an expert assessment of what went wrong. In addition, for some claims that would otherwise

be too small to justify the cost of litigation, panels might encourage claiming by providing patients with a lower-cost way to evaluate the strength of claims, see Frank A. Sloan, State Responses to the Malpractice Insurance "Crisis" of the 1970s: An Empirical Assessment, 9 J. Health Pol., Pol'y & L. 629, 636 (1985), and--in the event of a positive panel assessment--with a low-cost expert witness for trial, see Patricia M. Danzon, The Frequency and Severity of Medical Malpractice Claims: New Evidence, Law & Contemp. Probs., Spring 1986, at 57, 72.

[FN261]. Restrictions on pre-panel discovery would be particularly unfair to plaintiffs, because plaintiffs are less likely than defendants to have informal access to information concerning liability.

[FN262]. In one survey of judge, physician, and attorney panelists in Arizona, a large majority of all three types of panelists stated that they could not have reached their findings without such a hearing. See Dale Ann Howard, An Evaluation of Medical Liability Review Panels in Arizona, St. Ct. J., Spring 1981, at 19, 24.

[FN263]. See Sloan, supra note 260, at 636.

[FN264]. Patricia M. Danzon, Medical Malpractice: Theory, Evidence, and Public Policy 199 (1985). For example, a 1981 study of panels in Arizona asked attorneys to estimate the additional expense attributable to panel hearings; the mean cost (counting time and out-of-pocket expenses) reported by survey respondents was between $3,000 and $4,000. See Howard, supra note 262, at 24. The cost of such a proceeding will only have increased since 1981.

[FN265]. Frank M. McClellan, Medical Malpractice: Law, Tactics and Ethics 90 (1994).

[FN266]. The impact of this effect will vary depending on factors such as the availability of prejudgment interest. See Robinson, supra note 244, at 29 ("[T]he availability of prejudgment interest in a growing number of states partially offsets the cost to claimants, and, even where such interest is not authorized explicitly, juries apparently make an implicit allowance for it in setting general damages." (citation omitted)).

[FN267]. See Frank A. Sloan et al., Effects of Tort Reforms on the Value of Closed Medical Malpractice Claims: A Microanalysis, 14 J. Health Pol., Pol'y & L. 663, 677 (1989).

[FN268]. For example, the Pennsylvania panel system was eventually held unconstitutional, in Mattos v. Thompson, 421 A.2d 190, 196 (Pa. 1980), based on a finding that the system caused such delay that it impermissibly burdened the state constitutional right to a jury trial. Arizona, Indiana, Rhode Island, and New York also experienced problems with panel delay. See Howard, supra note 262, at 21-22; James D. Kemper et al., Reform Revisited: A Review of the Indiana Medical Malpractice Act Ten Years Later, 19 Ind. L. Rev. 1129, 1133 (1986); Shmanske & Stevens, supra note 259, at 533; Betsy A. Rosen, Note, The 1985 Medical Malpractice Reform Act: The New York

State Legislature Responds to the Medical Malpractice Crisis with a Prescription For Comprehensive Reform, 52 Brook. L. Rev. 135, 162 (1986).

[FN269]. The panel assessment may facilitate settlement in some instances, by bringing the parties' valuations of the case closer together. See Hughes, supra note 246, at 65; Metzloff, supra note 246, at 442, 453. Some defense attorneys have stated that a panel's finding of liability can help to persuade the physician defendant to consent to settlement, which is a requirement in some insurance policies. See Barbara F. Klein, Comment, A Practical Assessment of Arizona's Medical Malpractice Screening System, 1984 Ariz. St. L.J. 335, 348. On the other hand, panels may sometimes delay settlement talks because parties may be inclined to hold off on serious settlement discussions until they obtain the panel's assessment of the case. For example, in a 1990 survey of eighty-eight malpractice plaintiffs' and defendants' attorneys in Arizona, Jona Goldschmidt found that thirty-five percent of the respondents "agreed or strongly agreed" with the statement that "there is no reason to enter into meaningful settlement negotiations until a panel finding is made." Jona Goldschmidt, Where Have All the Panels Gone? A History of the Arizona Medical Liability Review Panel, 23 Ariz. St. L.J. 1013, 1054-57 (1991).

[FN270]. Hughes, supra note 246, at 75.

[FN271]. See id. at 75-77.

[FN272]. Cf. Goldschmidt, supra note 269, at 1109 ("Claims exclusion should not be the measure of 'efficiency.'").

[FN273]. A 1980 study cited figures indicating that plaintiffs who lost before panels were less likely to proceed with their claims than plaintiffs who won before panels; the study asserted that these data "may indicate... that screening panels are effectively weeding out a number of unjustified claims." Peter E. Carlin, Medical Malpractice Pre-Trial Screening Panels: A Review of the Evidence 30 (1980). However, as Thomas Metzloff has pointed out, "Absent comparative insight into whether these claims would in fact have been asserted in court in the absence of a panel procedure, the conclusions drawn are questionable." Metzloff, supra note 183, at 215.

[FN274]. See Carlin, supra note 273, at 32-33 (discussing difficulties several state systems encountered in obtaining panelists, and noting statements by some New Jersey officials that the possibility of being called to testify at trial "deters many doctors from participating as panelists").

[FN275]. See supra text accompanying note 177.

[FN276]. See Cramm et al., supra note 190, at 710-12.

[FN277]. Ronald L. Goldman, The Reliability of Peer Assessments of Quality of Care, 267 JAMA 958, 958 (1992) (citations omitted).

[FN278]. Weiler et al., supra note 172, at 125.

[FN279]. Although Liang found that the anesthesiologists in his study had "a significant propensity... to be extremely critical of the defendant anesthesiologists in the cases" they reviewed, he noted that this may have been because academic physicians are more willing to remark upon perceived flaws in other physicians' performance. Liang, supra note 232, at 135.

[FN280]. See Thomas B. Metzloff, The Unrealized Potential of Malpractice Arbitration, 31 Wake Forest L. Rev. 203, 217 (1996) ("The conventional wisdom is that these panels, which looked something like arbitration panels, were ineffective in impacting the culture or reality of malpractice litigation; indeed, several states have recently abandoned their programs." (citation omitted)).

[FN281]. See Stuart Taylor, Jr. & Evan Thomas, Civil Wars, Newsweek, Dec. 15, 2003, at 43, 51 (discussing the proposal).

[FN282]. Common Good, Common Good: Why We Have Come Together, at http://cgood.org/about/ (last visited Jan. 20, 2004).

[FN283]. Common Good, Common Good Petition: America Needs a New System of Medical Justice: Current Proposals are Not Enough, at http://cgood.org/medicine/item?item_id=19297 (last visited Jan. 20, 2004).

[FN284]. Philip K. Howard, Op-Ed, The Best Course of Treatment, N.Y. Times, July 21, 2003, at A15.

[FN285]. See id. ("A reliable system of medical justice could take many forms, but because the critical issue in virtually all cases is whether the doctor complied with appropriate standards of care, the key element must be expert judges ruling on standards of care.").

[FN286]. See id. (noting the "value [of] predictability" and the fact that "[j]uries can't make consistent rulings of what is reasonable care and what is not").

[FN287]. Elwell, supra note 24, at 36.

[FN288]. Id. at 48.

[FN289]. Id. at 56.

[FN290]. Foderé's remark that legal medicine constantly presents new and unforeseen variations, see 1 Foderé, supra note 26, at vii ("Every day in legal medicine, as in clinical medicine, there arise countless variations and cases that could not have been foreseen." (author's translation)), continues to be true some two centuries later.

[FN291]. David P. Currie & Frank I. Goodman, Judicial Review of Federal Administrative Action: Quest for the Optimum Forum, 75 Colum. L. Rev. 1, 63 (1975); Rochelle C. Dreyfuss, Forums of the Future: The Role of Specialized Courts in Resolving Business Disputes, 61 Brook. L. Rev. 1, 16 (1995).

[FN292]. Gross, supra note 11, at 1181-82.

[FN293]. See Richard A. Posner, Will the Federal Courts of Appeals Survive Until 1984? An Essay on Delegation and Specialization of the Judicial Function, 56 S. Cal. L. Rev. 761, 783 (1983); Richard L. Revesz, Specialized Courts and the Administrative Lawmaking System, 138 U. Pa. L. Rev. 1111, 1149 (1990).

[FN294]. See Rochelle Cooper Dreyfuss, The Federal Circuit: A Case Study in Specialized Courts, 64 N.Y.U. L. Rev. 1, 29 (1989); cf. Rai, supra note 204, at 894 (advocating creation of "a specialized trial court" for patent cases "with lay judges who [have] basic training in the scientific method, and who [are] given sufficient resources to appoint experts liberally").

[FN295]. Physicians and insurance companies will be repeat players on the defense side; plaintiffs' lawyers will be repeat players on the plaintiff side.

[FN296]. See Geoffrey C. Hazard, Jr., The Role of the Bar in Politicized Judicial Elections, 39 Willamette L. Rev. 1349, 1351-52 (2003).

[FN297]. American Bar Association Commission on the 21st Century Judiciary, Report: Justice in Jeopardy 22 (2003) [hereinafter ABA Report].

[FN298]. Republican Party of Minn. v. White, 536 U.S. 765, 788 (2002).

[FN299]. ABA Report, supra note 297, at 90.

[FN300]. See Marvin Comisky & Philip C. Patterson, The Judiciary--Selection, Compensation, Ethics, and Discipline 6 (1987) ("Critics of executive appointment have pointed out that the typical chief executive is subject to political pressures based on partisan considerations, and is also apt to expect a quid pro quo from his appointees."); id. at 5 (noting that criticisms of legislative appointment of judges include the observation "that legislators are too apt to be politically motivated in selecting for judicial candidates").

[FN301]. 40 Pa. Cons. Stat. Ann. § 1303.515(a) (West Supp. 2003).

[FN302]. Pennsylvania's Civil Procedural Rules Committee has proposed a new rule to implement the statute; the proposed rule specifies the procedure for making a motion under the statute, but does not discuss what factors should be considered in determining the motion. See Sup. Ct. of Pa., Civil Procedural Rules Comm., Proposed Recommendation No. 189 (2003).

[FN303]. See, e.g., Irene Deaville Sann, Remittiturs (and Additurs) in the Federal Courts: An Evaluation with Suggested Alternatives, 38 Case W. Res. L. Rev. 157, 187 (1987-88) (citations omitted).

[FN304]. N.Y. C.P.L.R. 5501(c) (McKinney 1997); see also infra notes 353- 54 and accompanying text.

[FN305]. For a discussion of malicious prosecution claims and other claims a successful malpractice defendant might consider asserting, see generally Sheila L. Birnbaum, Physicians Counterattack: Liability of Lawyers for Instituting Unjustified Medical Malpractice Actions, 45 Fordham L. Rev. 1003 (1977).

[FN306]. See Adam Liptak, Doctors' Testimony Under Scrutiny, N.Y. Times, July 6, 2003, at A10. In addition, a nonprofit organization called the Coalition and Center for Ethical Medical Testimony has been formed "to make honesty and ethicality the sine qua non of physicians and others engaged in healthcare who serve as expert witnesses, and to eliminate the ability of unethical experts to testify with impunity in medical-legal matters." Coalition & Ctr. for Ethical Med. Testimony, Statement of Purpose 2003, at http://www.ccemt.org/index.pl/mission.

[FN307]. 253 F.3d 967 (7th Cir. 2001).

[FN308]. Id. at 968.

[FN309]. See id. at 971, 974.

[FN310]. Id. at 969.

[FN311]. Id. at 974.

[FN312]. See id. at 972.

[FN313]. Id.

[FN314]. Id. at 972-73.

[FN315]. An AANS member who had testified for a plaintiff presumably could bring a complaint concerning the testimony of the defendant's expert witness. It seems likely, however, that malpractice plaintiffs and defendants would have greater incentives to bring such complaints than expert witnesses would. Thus, the rule that only AANS members can initiate complaints seems likely to render complaints against plaintiffs' experts more probable than complaints against defendants' experts.

[FN316]. As the Seventh Circuit stated:
Austin had been retained to testify on behalf of a woman whose recurrent laryngeal nerve

was permanently damaged in the course of an anterior cervical fusion performed by Dr. Ditmore.... According to the testimony that Austin was permitted to give at trial, he believes and "the majority of neurosurgeons" would concur that the plaintiff could not have suffered a permanent injury to her recurrent laryngeal nerve unless Dr. Ditmore had been careless, because she had no anatomical abnormality that might have enabled such an injury to result without negligence on the surgeon's part--though in the disciplinary hearing it emerged that, because the recurrent laryngeal nerve is difficult to see, and often is not seen during the operation, it may be impossible to determine whether the particular patient's nerve is unusually susceptible to injury. Austin testified that Ditmore must have rushed the operation (though there was no other evidence of that) and as a result retracted the tissues adjacent to the recurrent laryngeal nerve too roughly.... [But] Austin could hardly be considered an expert on anterior cervical fusion, having performed only 25 to 30 of them in more than 30 years in practice, although he had performed a large number of other cervical operations. Ditmore in contrast had performed 700 anterior cervical fusions-- with exactly one case of permanent damage to a patient's recurrent laryngeal nerve, namely the case of the patient who had sued him.
Dr. Austin claimed at the hearing that he had based his opinion on [two articles].... Neither article supports Austin's testimony.... Austin admitted that he hadn't discussed the matter with any other medical professionals....
... Asked on cross-examination at the malpractice trial to explain why the medical literature did not confirm his view of what a majority of neurosurgeons think, Austin responded lamely that the "medicolegal atmosphere that we're in these days" had deterred the surgical community from acknowledging that this particular complication of anterior cervical fusion could occur only through the surgeon's negligence.
Id. at 969-71.

[FN317]. See id. at 973.

[FN318]. See id. at 971.

[FN319]. See Michael Higgins, Docking Doctors?: AMA Eyes Discipline for Physicians Giving "False" Testimony, A.B.A. J., Sept. 1998, at 20.

[FN320]. See supra text accompanying notes 156-59.

[FN321]. Daniel W. Shuman, Expertise in Law, Medicine, and Health Care, 26 J. Health Pol., Pol'y & L. 267, 269 (2001) (citing Geoffrey C. Hazard, Jr. et al., Civil Procedure (4th ed. 1992); Tom R. Tyler, Why People Obey the Law (1992)).

[FN322]. See Rai, supra note 204, at 892 (arguing that "[i]n technically complex cases involving conflicting expert testimony,... reducing the adversarial component" through "use of third-party expertise" may be useful).

[FN323]. See supra text accompanying note 137.

[FN324]. See supra text accompanying note 138.

[FN325]. See supra text accompanying notes 116-19.

[FN326]. See supra text accompanying notes 206-07. For an early proposal concerning possible ways to assist judges in handling scientific questions, see Harold Leventhal, Environmental Decisionmaking and the Role of the Courts, 122 U. Pa. L. Rev. 509, 546-54 (1974).

[FN327]. See Reference Manual on Scientific Evidence (2d ed. 2000).

[FN328]. The Nat'l Academies, Science, Technology, and Law Program, at http://www7.nationalacademies.org/stl/ (last visited Jan. 19, 2004).

[FN329]. See Nat'l Ctr. for State Courts, Science, Technology and the Law, Frequently Asked Questions, at http://www.ncsconline.org/WCDS/Topics/topic1.asp?search_value=Science,%20Technology%C20and%C20the%Law (last visited Jan. 27, 2004).

[FN330]. In federal court,

Two principal sources of authority permit a court to appoint an expert, each envisioning a somewhat different role.... Appointment under Federal Rule of Evidence 706 anticipates that the appointed expert will function as a testifying witness....

Supplementing the authority of Rule 706 is the broader inherent authority of the court to appoint experts who are necessary to enable the court to carry out its duties. This includes authority to appoint a "technical advisor" to consult with the judge during the decision-making process.

William W. Schwarzer & Joe S. Cecil, Management of Expert Evidence, in Reference Manual on Scientific Evidence 39, 59 (2d ed. 2000).

[FN331]. See http://www.aaas.org/spp/case/case.htm (last visited Jan. 13, 2004).

[FN332]. See The Registry of Indep. Scientific & Technical Advisors, A Program of the Private Adjudication Center: Duke University School of Law, at http://www.law.duke.edu/PAC/registry/index.html (last visited Jan. 21, 2004).

[FN333]. Krafka et al., supra note 19, at 316 n.6, 325, 326 tbl. 5.

[FN334]. Schwarzer & Cecil, supra note 330, at 61.

[FN335]. See Brennan, supra note 11, at 7-8 (arguing that partisan experts ordinarily "have every incentive to take as radical a position as possible," and that, by contrast, the use of a nonpartisan expert will "moderate" the testimony of the parties' experts by motivating those experts "to demonstrate how their views relate to those of the court-appointed expert").

[FN336]. Ellen E. Deason, Court-Appointed Expert Witnesses: Scientific Positivism

Meets Bias and Deference, 77 Or. L. Rev. 59, 84, 93 (1998).

[FN337]. Id. at 63.

[FN338]. See id. at 143-55.

[FN339]. Krafka et al., supra note 19, at 314, 326 tbl. 5.

[FN340]. See Valerie P. Hans, U.S. Jury Reform: The Active Jury and the Adversarial Ideal, 21 St. Louis U. Pub. L. Rev. 85, 87 (2002).

[FN341]. See id. at 88-90.

[FN342]. See, e.g., Greene & Bornstein, supra note 196, at 765 (arguing that "jurors' determinations of damages could be assisted by preinstructions and by removing the blindfold on various provisions of damages doctrine," and that "bifurcation and special verdict forms may be helpful in certain circumstances").

[FN343]. See, e.g., Jury Trial Innovations 5, 14-15 (G. Thomas Munsterman et al. eds., 1997) (Vicki L. Smith contributor).

[FN344]. See Jury Trial Innovations, supra note 343, at 151-56.

[FN345]. See Krafka et al., supra note 19, at 316 n.6, 326 tbl. 5 (stating that 10% of respondents in the 1998 survey of federal judges reported having used this approach).

[FN346]. See Jury Trial Innovations, supra note 343, at 109-11, 174-76.

[FN347]. See Jury Trial Innovations, supra note 343, at 141-47; Krafka et al., supra note 19, at 316 n.6, 326 (stating that some 16% of respondents in 1998 survey of federal judges reported having "[a]llow[ed] jurors to question experts directly or through the court").

[FN348]. See, e.g., Martin J. Bourgeois et al., Nominal and Interactive Groups: Effects of Preinstruction and Deliberations on Decisions and Evidence Recall in Complex Trials, 80 J. Applied Psychol. 58 (1995); Lynne ForsterLee & Irwin A. Horowitz, Enhancing Juror Competence in a Complex Trial, 11 Applied Cognitive Psychol. 305 (1997); Lynne ForsterLee et al., Juror Competence in Civil Trials: Effects of Preinstruction and Evidence Technicality, 78 J. Applied Psychol. 14 (1993).

[FN349]. See American Judicature Society, Enhancing the Jury System: A Guidebook for Jury Reform 21-23, 27-30 (1999).

[FN350]. Indeed, some research suggests that caps might actually increase both the size and variability of jury awards in many cases, because of the potential anchoring effect if jurors know of the cap. In a recent experiment, Saks et al. found that the mean award for

a low-severity injury by mock jurors who were told of the existence of a $250,000 cap on damages was significantly higher than mean awards by jurors who were not told of the cap, and that the awards by jurors told of the cap were significantly more variable than awards by other jurors. See Michael J. Saks et al., Reducing Variability in Civil Jury Awards, 21 Law & Hum. Behav. 243, 249, 251, 253-54 (1997). Though this study looked at mock jurors and not at mock juries, it is still suggestive, at least in the absence of evidence that group deliberation would change the results. Although jurors in an actual trial setting might not be told of the existence of a cap, the publicity surrounding legislative deliberation over caps makes it likely that at least one juror would be aware of the cap's existence, and that information could be communicated to other jurors during deliberations.

[FN351]. See Diamond et al., supra note 236, at 321.

[FN352]. See Bovbjerg et al., supra note 240, at 953-56. Bovbjerg, Sloan, and Blumstein also suggest that awards could be set by means of "a matrix of values that would award fixed damage amounts according to the severity of injury and age of the injured party," or that awards could be constrained by "a system of flexible floors and ceilings that vary with injury severity and victim age." Id. at 938-39.

[FN353]. See Diamond et al., supra note 236, at 322 (citing N.Y. C.P.L.R. 5501(c) (McKinney 1986)). Since 1986, New York's mid-level appellate courts have been directed by statute to "determine that an award is excessive or inadequate if it deviates materially from what would be reasonable compensation," N.Y. C.P.L.R. 5501(c) (McKinney 1997), and the New York courts have interpreted this standard as applying at the trial level as well. See, e.g., Shurgan v. Tedesco, 578 N.Y.S.2d 658 (App. Div. 1992). The "deviates materially" standard is easier to meet than the more traditional test (under which a court would grant remittitur only if the jury's award "shocked the conscience" of the court).
Baldus, MacQueen, and Woodworth present a detailed proposal for comparative judicial review of jury awards. See David Baldus et al., Improving Judicial Oversight of Jury Damages Assessments: A Proposal for the Comparative Additur/Remittitur Review of Awards for Nonpecuniary Harms and Punitive Damages, 80 Iowa L. Rev. 1109 (1995). For a discussion of the challenges of comparative review, and an illustration of one approach to those challenges, see Geressy v. Digital Equipment Corp., 980 F. Supp. 640, 653-76 (E.D.N.Y. 1997) (Weinstein, J.) (applying New York's "deviates materially" standard to jury awards for, inter alia, pain and suffering). See also Diamond et al., supra note 236, at 322 (discussing Geressy).

[FN354]. The researchers found that in a sample of 293 medical malpractice plaintiff verdicts described in a jury verdict reporter for New York City and neighboring counties during 1985-1997, at least 96 awards were diminished post-verdict: 46 through post-verdict settlement, 23 through remittitur, 17 due to comparative negligence, and 10 for unknown reasons. Because of these reductions, the mean adjusted award in the New York sample was only about 62% of the mean original jury award. See Neil Vidmar et al., Jury Awards for Medical Malpractice and Post-Verdict Adjustments of Those Awards, 48

DePaul L. Rev. 265, 285 (1998).
Vidmar et al. noted that these figures likely underestimate the total number of post-verdict reductions, because the results of appeals were not included. See id. at 286. (The researchers found three post-verdict increases, as well: two from post-verdict settlements, and one from additur (the converse of remittitur). See id. at 285.)
The researchers also studied samples of verdicts from Florida (1987-1996) and California (1991-1997). The data indicate that the post-verdict experience in those two states differs from that in New York. Id. at 290-99.

[FN355]. Stephen B. Burbank, Procedure and Power, 46 J. Legal Educ. 513, 514 (1996).

[FN356]. See Paul D. Carrington, Making Rules to Dispose of Manifestly Unfounded Assertions: An Exorcism of the Bogy of Non-Trans-Substantive Rules of Civil Procedure, 137 U. Pa. L. Rev. 2067, 2083, 2085 (1989).

[FN357]. See Geoffrey C. Hazard, Jr., Discovery Vices and Trans-Substantive Virtues in the Federal Rules of Civil Procedure, 137 U. Pa. L. Rev. 2237, 2246-47 (1989).

[FN358]. See id.

[FN359]. Cf. Stephen B. Burbank, The Transformation of American Civil Procedure: The Example of Rule 11, 137 U. Pa. L. Rev. 1925, 1937-38 (1989).

[FN360]. See Stephen N. Subrin, Fudge Points and Thin Ice in Discovery Reform and the Case for Selective Substance-Specific Procedure, 46 Fla. L. Rev. 27, 41, 49 (1994).

[FN361]. See Stephen B. Burbank, The Costs of Complexity, 85 Mich. L. Rev. 1463, 1473 (1987) (book review).

[FN362]. See id.; see also Stephen B. Burbank, Of Rules and Discretion: The Supreme Court, Federal Rules and Common Law, 63 Notre Dame L. Rev. 693, 718 (1988); Subrin, supra note 360, at 54.

[FN363]. See Subrin, supra note 360, at 49.

[FN364]. 28 U.S.C. § 2072(b) (2003).

[FN365]. Cf. Burbank, supra note 361, at 1475.

[FN366]. See supra text accompanying notes 178-79.

[FN367]. A dramatic case in point is Pennsylvania's remittitur provision, which apparently would require reduction of an award of compensatory damages solely because the court anticipated that doctors would leave the community in response to the award. See supra text accompanying note 301.

[FN368]. See supra text accompanying notes 306-19.

[FN369]. Cf. Shuman, supra note 321, at 286 ("Many of the problems that courts face in assessing medical expertise are the inevitable result of substantive legal standards.").

[FN370]. In addition to the "avoidable classes of events" approach discussed in the text, reform ideas include proposals for enterprise liability, see, e.g., Kenneth S. Abraham & Paul C. Weiler, Enterprise Medical Liability and the Evolution of the American Health Care System, 108 Harv. L. Rev. 381, 415- 26 (1994); William M. Sage et al., Enterprise Liability for Medical Malpractice and Health Care Quality Improvement, 20 Am. J.L. & Med. 1, 16-26 (1994), and no-fault compensation, see, e.g., Randall R. Bovbjerg & Frank A. Sloan, No-Fault for Medical Injury: Theory And Evidence, 67 U. Cin. L. Rev. 53, 64-70 (1998); David M. Studdert & Troyen A. Brennan, Toward a Workable Model of "No-Fault" Compensation for Medical Injury in the United States, 27 Am. J.L. & Med. 225, 229-35 (2001).

[FN371]. Bovbjerg, supra note 174, at 2197-98; see also Institute of Medicine of the National Academies, Fostering Rapid Advances in Health Care: Learning from System Demonstrations 83 (Janet M. Corrigan et al. eds., 2002).

[FN372]. See Weiler et al., supra note 172, at 3.

[FN373]. See Marcus, supra note 4, at 779.

[FN374]. See, e.g., Stephen D. Sugarman, The Need to Reform Personal Injury Law Leaving Scientific Disputes to Scientists, 248 Science 823, 823-24 (1990).

[FN375]. Neil Vidmar, Are Juries Competent to Decide Liability in Tort Cases Involving Scientific/Medical Issues? Some Data from Medical Malpractice, 43 Emory L.J. 885, 896-99 (1994).

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